

# Help Protect Missouri's White-tailed Deer!



## Info About CWD and Related MDC Regulations and Actions

MAY 2016

### NEW FOR 2016

The Department will require hunters to present their deer, or the head with at least six inches of the neck intact, for CWD testing at an MDC sampling location on the day of harvest if they harvest it in one of the 29 CWD-management-zone counties in northern, central, and east-central Missouri during the opening weekend of the fall firearms deer season, Nov. 12 and 13. The testing is free and hunters can also get free test results. Sampling locations will be listed in the 2016 Fall Deer & Turkey Hunting Regulations and Information booklet and online at [mdc.mo.gov](http://mdc.mo.gov).

### WHAT IS CHRONIC WASTING DISEASE (CWD)?

**Chronic Wasting Disease is a fatal disease that is spread from deer to deer and kills all deer it infects.** This neurological disease infects only deer and other members of the deer family (called cervids) by causing degeneration of brain tissue, which slowly leads to death. It is caused by misshapen proteins called “prions.” The disease has no vaccine or cure and is 100-percent fatal.

### HOW IS CWD SPREAD?

**CWD is spread from deer to deer** through direct deer-to-deer contact and through deer contact with soil that has been contaminated through the feces, urine, saliva or carcasses of infected deer. The potential for transmission increases when deer gather in larger, concentrated numbers. Young bucks can also potentially spread the disease to new areas as they search for territories and mates. Moving carcasses of potentially infected deer out of the immediate area and improperly disposing of them can also spread the disease.

### WHY IS CWD SUCH A THREAT?

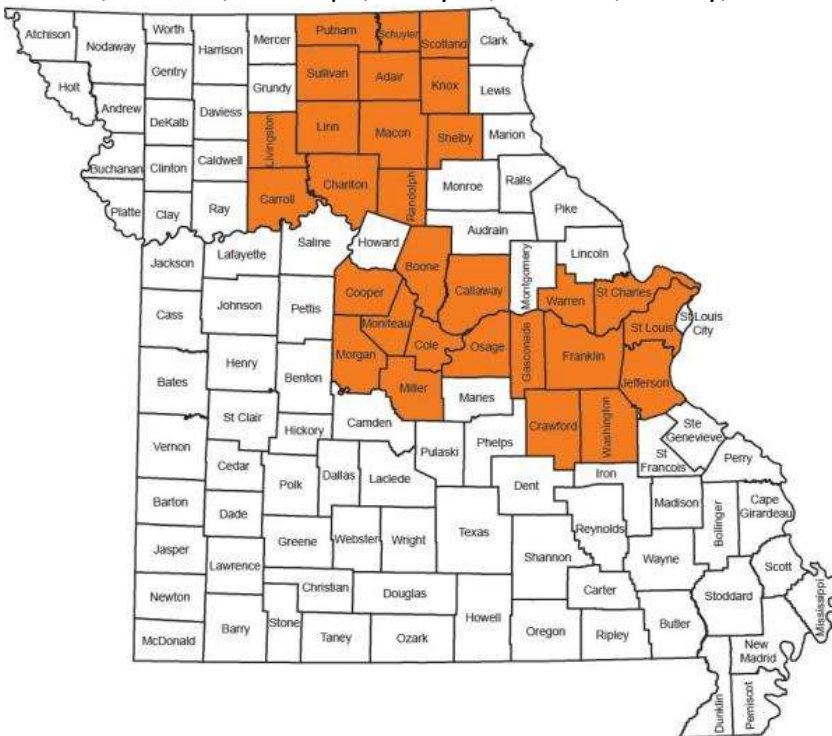
- **CWD has the potential to greatly reduce deer numbers and deer hunting.** The continued spread of CWD has the potential to significantly reduce deer numbers in the state over time -- and therefore reduce future hunting and wildlife-watching opportunities for Missouri's nearly 520,000 deer hunters and almost two million wildlife watchers.
- **CWD can hurt Missourian's economically.** CWD could also reduce the economic benefits to local businesses and economies from deer hunting and watching. The white-tailed deer is a popular, valued and important species of native wildlife and game animal in Missouri. Missouri offers some of the best deer hunting in the country, and deer hunting is an important part of many Missourians' lives and family traditions. Deer hunting is also an important economic driver in Missouri and gives a \$1 billion annual boost to the state and local economies.

**Research says no.** CWD is limited to members of the deer family. However, the Centers for Disease Control and Prevention recommends not eating deer infected with CWD. MDC recommends that hunters and others wear gloves when processing any game to help prevent the transmission of any potential disease.

**We don't know.** CWD was first found in captive mule deer at a research facility in Colorado in the 1960s. It was first found in the wild in Colorado in the 1980s. Since then, it has spread to almost two dozen states. The first cases in Missouri were found at a private big-game hunting facility in 2010 and 2011. The first cases in free-ranging deer were found soon after near the private facility.

**CWD has been found in northeast, central, and east-central Missouri.** The first cases of CWD in Missouri were detected in 2010 and 2011 in captive deer at private big-game hunting preserves in Linn and Macon counties. A total of 11 cases were confirmed in captive deer at the facilities. The total number of Missouri free-ranging deer that have tested positive for CWD is 33 with 21 found in Macon County, 9 in Adair, one in Cole, one in Franklin, and one in Linn.

**29 counties in, northeast, central, and east-central Missouri are affected. They make up MDC's CWD management zones.** The zones include these counties within or that touch a radius of approximately 25 miles from where the disease has been found: Adair, Boone, Callaway, Carroll, Chariton, Crawford, Cole, Cooper, Franklin, Gasconade, Jefferson, Knox, Linn, Livingston, Macon, Miller, Moniteau, Morgan, Osage, Putnam, St. Charles, St. Louis, Randolph, Schuyler, Scotland, Shelby, Sullivan, Washington, and Warren.



## WHAT ARE THE SPECIAL REGULATIONS FOR CWD MANAGEMENT ZONES?

- **NEW FOR 2016:** The Department will require hunters to present their deer, or the head with at least six inches of the neck intact, for CWD testing at an MDC sampling location on the day of harvest if they harvest it in one of the 29 CWD-management-zone counties during the opening weekend of the fall firearms deer season, Nov. 12 and 13. The testing is free and hunters can also get free test results. Sampling locations will be listed in the 2016 Fall Deer & Turkey Hunting Regulations and Information booklet and online at [mdc.mo.gov](http://mdc.mo.gov).
- **MDC has removed the antler-point restriction for CWD-management-zone counties.** This was done so young bucks are no longer protected from harvest because young bucks can spread the disease to new areas as they search for territories and mates.
- **MDC has increased the availability of firearms antlerless permits from 1 to 2 for CWD-management-zone counties.** This was done to help prevent undesired population increases in local deer numbers.
- **MDC has restricted feeding deer and placing minerals for deer in CWD-management-zone counties.** Feeding deer unnaturally concentrates deer in a small area, which can help spread the disease. Exceptions to the regulation include feeding of wildlife within 100 feet of any residence or occupied building, feed placed in a manner that excludes access by deer, feed and minerals used solely for normal agricultural, forest management, or wildlife food-plot-production practices.
- **MDC strongly discourages the removal of deer carcasses from management-zone counties.** Certain carcass parts, such as boned out meat, are at lower risk to move because the prion that causes CWD is not concentrated in these parts.

## WHAT IS MDC DOING TO SLOW THE SPREAD OF CWD?

- **NEW FOR 2016:** The Department will require hunters to present their deer, or the head with at least six inches of the neck intact, for CWD testing at an MDC sampling location on the day of harvest if they harvest it in one of the 29 CWD-management-zone counties during the opening weekend of the fall firearms deer season, Nov. 12 and 13. The testing is free and hunters can also get free test results. Sampling locations will be listed in the 2016 Fall Deer & Turkey Hunting Regulations and Information booklet and online at [mdc.mo.gov](http://mdc.mo.gov).
- **MDC tests deer for CWD in areas where CWD has been found.** MDC is working with hunters, landowners, and taxidermists to collect tissue samples for CWD testing from hunter-harvested deer, sick deer, and road-kill deer in northeast, central, and east-central Missouri where CWD has been found. MDC also works with private landowners in those areas very near to CWD detections to harvest additional deer for testing.
- **MDC also conducts broader, ongoing statewide testing for CWD** and focuses on one-half of the state each year. Most of these test samples come from hunter-harvested deer and are collected by taxidermists. The purpose of this ongoing surveillance is to detect new areas of infection as early as possible. This broader CWD monitoring focused on the southern half of Missouri in 2015 and **no deer from southern Missouri were found to be positive for CWD.**
- **MDC has removed the antler-point restriction for CWD-management-zone counties.** This was done so young bucks are no longer protected from harvest because young bucks can spread the disease to new areas as they search for territories and mates.

- **MDC has increased the availability of firearms antlerless permits from 1 to 2 for CWD-management-zone counties.** This was done to help prevent undesired population increases in local deer numbers.
- **MDC strongly discourages people from feeding deer, and has restricted feeding deer and placing minerals for deer in CWD-management-zone counties.** Feeding deer unnaturally concentrates deer in a small area and that can help spread the disease.
- **MDC strongly discourages the removal of deer carcasses from CWD-management-zone counties.** Certain carcass parts, such as boned out meat, are at lower risk to move because the prion that causes CWD is not concentrated in these parts.

## **WHAT IS MDC DOING IN RESPONSE TO CWD BEING FOUND IN NORTHERN ARKANSAS?**

- **MDC tested about 2,700 deer from southern Missouri for CWD last year as part of its ongoing, statewide monitoring efforts.** No deer from southern Missouri were found to be positive for CWD.
- **MDC will continue to test deer in southern Missouri and focus on Missouri counties near the Arkansas border where CWD has been found in that state.**
- **MDC will continue to communicate with the Arkansas Game and Fish Commission to monitor findings and collaboratively interpret what they mean.**

## **HOW ARE DEER TESTED FOR CWD?**

Tissues samples taken from lymph nodes in the heads of harvested deer and some road-killed deer are sent to an independent lab for testing. There is no approved test for CWD on live deer.

## **WHAT MUST HUNTERS DO TO HAVE THEIR DEER TESTED?**

Hunters simply need to take their harvested deer -- or the head with at least six inches of neck intact -- to a participating taxidermist, MDC office, or MDC sampling station to have a tissue sample removed. Having a tissue sample removed and test results are free. Hunters can check their results on line through the MDC website. Sampling locations can be found on the MDC website at [mdc.mo.gov](http://mdc.mo.gov).

## **WHAT DO HUNTERS WHO PROCESSES DEER IN THE FIELD NEED TO SUBMIT A SAMPLE?**

Bag and bring the head and at least six inches of the attached neck to a sample collection station.

## **HOW MANY DEER ARE TESTED FOR CWD AND WHAT ARE THE RESULTS?**

- **MDC tests several thousand wild deer around the state each year for CWD** and focuses both on areas in and around where CWD has been found and on broader statewide testing.
- **We have found 33 CWD-positive wild deer** in northeast, central, and east-central Missouri since the disease was first discovered in the state in 2010 **with 21 found in Macon County, 9 in Adair, one in Cole, one in Franklin, and one in Linn.**
- **MDC's 2015-2016 fall and winter CWD testing consisted of nearly 7,700 free-ranging deer.**
- **Nearly 2,700 of the almost 7,700 deer tested last fall and winter were part of MDC's broader, statewide CWD monitoring** and the focus was on the southern half of Missouri. No deer from southern Missouri were found to be positive for CWD.

- **We have collected more than 51,000 tissue samples** from around the state since we began testing for the emerging disease back in 2001.

## **WHY DOESN'T MDC TEST MORE DEER?**

**MDC continues to encourage more hunters to have their harvested deer tested so we can get more samples.**

**NEW FOR 2016:** The Department will require hunters to present their deer, or the head with at least six inches of the neck intact, for CWD testing at an MDC sampling location on the day of harvest if they harvest it in one of the 29 CWD-management-zone counties during the opening weekend of the fall firearms deer season, Nov. 12 and 13. The testing is free and hunters can also get free test results. Sampling locations will be listed in the 2016 Fall Deer & Turkey Hunting Regulations and Information booklet and online at [mdc.mo.gov](http://mdc.mo.gov).

## **CAN CWD BE ELIMINATED?**

**Research suggests no.** Research from other states that have had CWD much longer than Missouri shows that the disease has been impossible to eliminate once it has become well established in an area. Therefore, MDC will continue to focus on managing the levels of the disease where it has been found and reducing the risk of introducing the disease to new areas of the state.

## **COULD CWD HAVE ALWAYS BEEN IN MISSOURI BUT JUST NOT DETECTED?**

**Research suggests no.** In the few areas of Missouri where CWD has been found, the small number of cases is very low compared to the overall local deer population. Based on this “low prevalence” we are confident the disease was recently introduced to Missouri. To help explain, in states where CWD has become well established in the free-ranging population, the disease increases overtime in prevalence – which is the number of cases of a disease that are present in a particular population at a given time. Based on the low prevalence in Macon, Adair and Cole counties – where cases have been found -- and the failure to detect the disease in other parts of the state, we are confident that the disease was recently introduced to Missouri.

## **WHY HAS MDC DONE CULLING OF DEER IN AREAS WHERE CWD HAS BEEN FOUND?**

**Reducing the numbers of potentially infected deer in the immediate areas where CWD has been found can help slow the spread of the disease.** Research shows that CWD tends to be clumped in local areas so when we find a deer with CWD, removing other deer in the immediate area can remove other deer that may be infected, which can help slow the spread of the disease.

## **WHAT ARE THE SIGNS OF CWD AND CAN A CWD-POSITIVE DEER APPEAR HEALTHY?**

**Deer infected with CWD do not always look sick.** Symptoms include excessive salivation, drooping head/ears, tremors, emaciation, and change in behavior (lack of fear of humans and coordination). It can take months or years for a deer infected with CWD to show any symptoms. However, an infected deer can spread the disease to other deer and contaminate the environment while appearing healthy.

## **WHAT IS THE DIFFERENCE BETWEEN CWD AND HD OR BLUE-TONGUE DISEASE?**



- **CWD is an always fatal disease that is spread from deer to deer.** Without getting too technical, CWD is caused by misshapen proteins called “prions” that concentrate in the brain, lymph nodes, spine, and eye tissue of infected animals and lead to the slow death of all infected animals. It is spread from deer to deer through body fluids. Symptoms include excessive salivation, drooping head/ears, tremors, emaciation, and change in behavior (lack of fear of humans and coordination). It can take months or years for a deer infected with CWD to show any symptoms. The continued spread of Chronic Wasting Disease in Missouri has the long-term potential to significantly reduce deer numbers in the state over time
- **HD or blue tongue is not always fatal, is not spread from deer to deer, and has always been in Missouri.** Hemorrhagic Disease (HD) or Blue Tongue is caused by a naturally occurring virus that has periodically affected deer populations across the U.S. -- including in Missouri -- for decades with no long-term impacts to the population. It is spread by midge flies during the summer and fall and ends when cold weather kills the flies. Symptoms include fever, reduced activity, and swollen neck, tongue or eyelids. Because sick deer are feverish, they are often found near water. Deer typically show symptoms within days of being infected. Not all deer die from HD. Deer that survive HD infection develop antibodies that provide future immunity to the virus. Hemorrhagic Disease can have significant short-term impacts on a deer herd, but has never been shown to have long-term impacts.

## WHAT CAN PEOPLE DO TO HELP?

- **Donate tissue samples from harvested deer for CWD testing.** We continue to test harvested deer from around the state for CWD and are focusing on deer harvested in the 29 central, east-central and northeast counties in and around where CWD has been discovered.
- **Do not move whole deer carcasses out of the 29 central, east-central and northeast counties in and around where CWD has been found.** Moving carcasses of potentially infected deer out of the immediate areas where harvested and improperly disposing of them can also spread the disease. Certain carcass parts, such as boned out meat, are at lower risk to move because the prion that causes CWD is not concentrated in these parts.
- **Do not feed deer or place minerals for deer.** CWD is spread through direct deer-to-deer contact and through deer contact with soil that has been contaminated with urine, feces or saliva from infected animals. The potential for transmission increases when deer gather in larger, concentrated numbers.
- **Report any deer that look sick or are acting strange to MDC staff.**

## WHERE CAN SOMEONE GET MORE INFORMATION?

- **National Wildlife Health Center** at [http://www.nwhc.usgs.gov/disease\\_information/chronic\\_wasting\\_disease/index.jsp](http://www.nwhc.usgs.gov/disease_information/chronic_wasting_disease/index.jsp)
- **Chronic Wasting Disease Alliance** has an extensive list of links at <http://www.cwd-info.org/index.php>
- **Centers for Disease Control and Prevention** at <http://www.cdc.gov/prions/cwd/index.html>
- **Contact MDC's Wildlife Health Program** at 573-815-7900.

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